

CLAIMS

1. A method of generating reports regarding an integrated circuit layout, the method comprising:

providing a plurality of control points associated with the integrated circuit layout;

performing a single simulation of the plurality of control points;

storing information from the single simulation in a database; and

extracting specific information from the database to generate the reports using a first set of checking parameters, wherein extracting is repeatable with a second set of checking parameters without repeating the steps of providing, performing, and storing.

2. The method of Claim 1, wherein providing the plurality of control points includes designating at least one of a type, a rule identification, a tolerance, and a target parameter for each control point.

3. The method of Claim 1, wherein storing information includes organizing the information in at least one of a main table, a statistics table, and a cell table.

4. The method of Claim 1, wherein extracting specific information includes creating a temporary table for the certain information.

5. The method of Claim 1, wherein extracting specific information includes viewing the specific information in at least one of a sequential browse mode, a view by area mode, a histogram mode, an error count mode, and a GDS mode.

6. The method of Claim 1, further including providing at least one new rule associated with the plurality of control points and storing new information in the database based on the at least one new rule and the single simulation.

7. A database for reporting results from simulating a layout, the database comprising:

a plurality of control points associated with the layout;
designated information regarding the plurality of control points; and

deviation information regarding the plurality of control points, wherein the deviation information includes a magnitude of each deviation.

8. The database of Claim 7, further including a spacing for each control point related to an edge of the layout.

9. The database of Claim 7, wherein the designated information includes at least one of a type, a rule identification, a tolerance, and a target parameter for each control point.

10. The database of Claim 7, wherein the designated information and the deviation information is organized in at least one of a main table, a statistics table, and a cell table.

11. A method of generating simulation reports regarding a layout, the method comprising:

dissecting feature edges on the layout into segments, each segment including a control point;

performing a single simulation of the layout using the control points;
storing simulation information in a database; and
extracting user-identified information from the database to generate the simulation reports.

12. The method of Claim 11, further including designating at least one of a type, a rule identification, a tolerance, and a target parameter for each control point.

13. The method of Claim 11, wherein storing simulation information includes organizing the information in at least one of a main table, a statistics table, and a cell table.

14. The method of Claim 11, wherein extracting user-identified information includes creating a temporary table for identified simulation information.

15. The method of Claim 11, wherein extracting user-identified information includes viewing the user-identified information in at least one of a sequential browse mode, a view by area mode, a histogram mode, an error count mode, and a GDS mode.

16. The method of Claim 11, further including providing at least one new rule associated with the control points and storing new information in the database based on the at least one new rule and the single simulation.

17. An apparatus for generating reports regarding an integrated circuit layout, the apparatus comprising:

means for providing a plurality of control points associated with the integrated circuit layout;

means for performing a single simulation of the plurality of control points;

means for storing information from the single simulation in a database; and

means for extracting specific information from the database to generate the reports using a first set of checking parameters, wherein extracting is repeatable with a second set of checking parameters without repeating the steps of providing, performing, and storing.

18. The apparatus of Claim 17, wherein the means for providing the plurality of control points includes means for designating at least one of a type, a rule identification, a tolerance, and a target parameter for each control point.

19. The apparatus of Claim 17, wherein the means for storing information includes means for organizing the information in at least one of a main table, a statistics table, and a cell table.

20. The apparatus of Claim 17, wherein the means for extracting specific information includes means for creating a temporary table for the certain information.